

Claims

[c1] **WHAT IS CLAIMED IS:**

1. A separator for a wet vacuum cleaner, the separator comprising:
a bottom;
a sidewall connected to the bottom and comprised of lamellas delimiting slots, wherein through the slots an air/gas flow enters an interior of the separator, delimited by the bottom and the sidewall, wherein the air/gas flow contains dirt/dust particles and/or water droplets;
wherein the lamellas each have at least one radial outer widened section, extending in a rotational direction of the separator, and at least one remaining lamella section, wherein the at least one radial outer widened section and the at least one remaining lamella section delimit together a turbulence chamber, respectively.

[c2] 2. The separator according to claim 1, wherein the lamellas have approximately an L-shaped cross-section.

[c3] 3. The separator according to claim 1, wherein the lamellas have approximately a T-shaped cross-section.

[c4] 4. The separator according to claim 1, wherein the

lamellas have approximately a U-shaped cross-section.

- [c5] 5. The separator according to claim 1, wherein the at least one radial outer widened section is a transverse stay oriented relative to the at least one remaining lamella section in the rotational direction, or counter to the rotational direction, or in the rotation direction and counter to the rotational direction.
- [c6] 6. The separator according to claim 1, wherein the at least one radial outer widened section has a projection extending in the rotational direction past the at least one remaining lamella section.
- [c7] 7. The separator according to claim 6, wherein the projection has only a minimal extension.
- [c8] 8. The separator according to claim 7, wherein a leading surface of the at least one radial outer widened section leading in the rotational direction is formed by a sidewall of the at least one remaining lamella section.
- [c9] 9. The separator according to claim 8, wherein a trailing surface of the at least one radial outer widened section extends approximately perpendicularly to a radial outer side of the at least one radial outer widened section.
- [c10] 10. The separator according to claim 9, wherein the ra-

dial outer side is curved at a great radius of curvature of a circular section.

- [c11] 11. The separator according to claim 9, wherein at least the leading surface of the at least one radial outer widened section in the rotational direction is beveled, or rounded, or beveled and rounded.
- [c12] 12. The separator according to claim 9, wherein the leading and trailing surfaces of the at least one radial outer widened section are beveled, or rounded, or beveled and rounded.
- [c13] 13. The separator according to claim 9, wherein the leading and trailing surfaces of the at least one radial outer widened section have approximately a same width in the rotational direction.
- [c14] 14. The separator according to 9, wherein the leading and trailing surfaces are connected to one another by a central surface section of the at least one radial outer widened section, wherein the trailing surface extends at a steeper angle relative to the central surface section than the leading surface.
- [c15] 15. The separator according to claim 14, wherein the trailing surface has a transition via a narrow end face section into a radially inwardly positioned inner side of

the at least one radial outer widened section.

- [c16] 16. The separator according to claim 15, wherein the end face section adjoins substantially perpendicularly the inner side.
- [c17] 17. The separator according to claim 15, wherein the inner side extends approximately parallel to the central surface section.
- [c18] 18. The separator according to claim 1, wherein the at least one remaining lamella section is a substantially radially extending longitudinal stay.
- [c19] 19. The separator according to claim 18, wherein the longitudinal stay, beginning at the at least one radial outer widened section, extends substantially radially inwardly.
- [c20] 20. The separator according to claim 18, wherein the longitudinal stay has a leading side surface and a trailing side surface in the rotational direction, wherein the leading and trailing side surfaces extend in a V-shape relative to one another.
- [c21] 21. The separator according to claim 20, wherein at least one of the trailing side surface and the leading side surface is curved to have a circular section shape.

- [c22] 22. The separator according to claim 20, wherein the leading side surface is curved at a greater radius of curvature than the trailing side surface.
- [c23] 23. The separator according to claim 18, wherein a radial inner end of the longitudinal stay is rounded.
- [c24] 24. The separator according to claim 23, wherein the radial inner end is rounded to have a circular section shape.
- [c25] 25. The separator according to claim 1, wherein the lamellas have at least one opening connecting the interior of the separator with an exterior side of the lamellas.
- [c26] 26. The separator according to claim 25, wherein on the exterior side of the lamellas at least one vacuum area is provided, respectively.
- [c27] 27. The separator according to claim 26, wherein the lamellas each have a step on the exterior side in the vacuum area, wherein the step delimits the vacuum area in a rotational direction of the separator in a forward direction.
- [c28] 28. The separator according to claim 27, wherein the vacuum area in the rotational direction of the separator is rearwardly open.

- [c29] 29. The separator according to 25, wherein the at least one opening opens into the turbulence chamber.
- [c30] 30. A separator for a wet vacuum cleaner, the separator comprising:
 - a bottom;
 - a sidewall connected to the bottom and comprised of lamellas delimiting slots, wherein through the slots an air/gas flow enters an interior of the separator, delimited by the bottom and the sidewall, wherein the air/gas flow contains dirt/dust particles and/or water droplets;
 - wherein the lamellas have at least one opening connecting the interior of the separator with an exterior side of the lamellas.